

DEVAL L. PATRICK GOVERNOR

TIMOTHY P. MURRAY LIEUTENANT GOVERNOR

JUDYANN BIGBY, MD SECRETARY

JOHN AUERBACH

The Commonwealth of Massachusetts
Executive Office of Health and Human Services
Department of Public Health

William A. Hinton State Laboratory Institute 305 South Street, Jamaica Plain, MA 02130

Jessica Lee, ADA Suffolk County District Attorney's Office

By e-mail

March 8, 2012

Re: Comm. v

State Lab no.

ADA Lee,

Please find the discovery materials, for the case noted above, collated in the following manner:

- 1) c.v.s of the chemists
- 2) the Drug Lab Evidence Office Receipt to the Boston Police.
- 3) the inventory control cards
- 4) the Drug Powder Analysis Forms
- 4) the gas chromatography/mass spectrometry (gc/ms) data

I was the custodial chemist for this case, responsible for the chain of custody, the weighing of the substance and the preliminary tests. Kate Corbett was the confirmatory chemist operating the gc/ms.

If you need further clarification of these materials, call me directly at (617) 983-6627.

Sincerely,

Michael Lawler Senior Chemist

Cc: Kate Corbett

### Curriculum Vitae

#### Michael Lawler

#### **Education:**

University of Virginia, Charlottesville, Va. Bachelor of Arts in English, 1975 Harvard University, Cambridge, Ma. Master of Arts in biology, 1995

## Experience:

1990-present currently Chemist III, Mass. Dept. of Public Health, Drug Lab analyst determining the identity of unknown substances and providing expert testimony in the Courts. Conduct special testing for poisons within drug exhibits (e.g. strychnine in MDMA)

2005-2008 lecturer in chemistry, Curry College, Milton, Ma.

1988-1990 New England Newborn Screening (NENS) Biochemist conducting pilot studies and validation trials of new newborn screening tests. Investigator and co-author of papers noted below. Introduced screening test for Biotinidase Deficiency. Liaison with interstate collaborators in national studies.

1983-1988 Supervised NENS urine screening lab for metabolic disorders. Conducted research in collaboration with Children's Hospital (Boston) detecting neuroblastoma, a cancer of early childhood. Conducted reference testing for rare metabolic disorders for an international audience.

1982-1983 NENS hypothyroid assay technologist with Tuft's University

1979-1981 Mass. Bay Community College, staff technologist preparing materials for the laboratory technician program, which included reagents, apparatus and maintaining stock cultures of human pathogens.

## Additional education and special training

Drug Analysis, completed six week training course by senior staff within the

Department of Public Health Drug Analysis Laboratory

National Laboratory Network Training Program course as Expert Witness

Qualified as an expert witness in the Massachusetts Courts and the U.S. District Court

Current Drug Trends - Multijurisdictional Drug Task Force Academy August 2009

CDC course in public health response to bioterrorism

U.S. Army course in biologic warfare and terrorism

DEA Special Testing Lab Seminar June 2011

Sigma-Aldrich LC/MS – New Applications Fall 2011

#### Journal Publications

<u>Screening</u>, 1992, 1:34-37; Lawler, M., Frederick, S., Rodriguez-Anza, S., Wolf, B., Levy, H., Newborn Screening for Biotinidase Deficiency, Pilot Study and Follow-up of Identified Cases

<u>Genetic Screening</u>, 1990, 11-18, Mitchell, M., Lawler, M., Walraven, C., Hermos, R., To Screen or Not to Screen for Congenital Hyperplasia: Is that the Question?

<u>The Journal of Pediatrics</u>, 116: 78-83, Secor-McVoy, J., Lawler, M., Schmidt, M., Ebers, D., Hart, P., Pettit, D., Blitzer, M., Wolf, B., *Partial Biotinidase Deficiency: Clinical and Biochemical Features* 

### **Professional Affiliations**

Northeastern Association of Forensic Scientists (NEAFS) since 2005

### Awards

Theobald Smith Education Grant for graduate studies

# Curriculum Vitae

Kate A. Corbett

## Education

Bachelor of Science Degree, CHEMISTRY May 2003 MERRIMACK COLLEGE

Coursework included: Organic Chemistry, Inorganic Chemistry, Quantitative Analysis, Instrumental Analysis, Physical Chemistry, Physics, Calculus

## <u>Employment</u>

Chemist II State Laboratory Institute (March 2008-Present)

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance and trafficking substances to determine violation of the Massachusetts drug laws
- Responsible for the identification of pharmaceuticals to determine violation of the Massachusetts drug laws in the identification.
- Operate analytical instrumentation, microscopes and balances for forensic drug analysis

Chemist I State Laboratory Institute (2005-March 2008)

祖位 化维产性 路路,然后,从湖上的位。

Massachusetts Department of Public Health

Drug Analysis Laboratory

- Responsible for the identification of substance to determine violation of the Massachusetts drug laws
- ➤ Operate analytical instrumentation for the purpose of performing forensic drug analysis → 100
- Successfully-completed an eight week training course in the analysis of drugs conducted by senior staff of the Department of Public Health, Drug Analysis Laboratory
- > Appointed an assistant analyst for the Department of Public Health, Drug Analysis Laboratory in 2005

Research Associate (September 2003 – August 2005)

SENSOR TECHNOLOGIES, INC - Shrewsbury, MA

- > Prepared chemistries used in making sensor beads
- > Generated and examined sensors employing fluorescence spectroscopy
- Performed protein, dye and sugar assays using UV/VIS spectrophotometry
- Carried out titrations on ricin using fluorescence correlation spectroscopy
- Statistical analysis of experimental data

Intern (March 2003 - August 2003)

MASSACHUSETTS STATE POLICE CRIME LABORATORY - Sudbury, MA

- Assisted in the gathering of case files to fulfill the National Institute of Justice's No Suspect Backlog Reduction Grant
- Observed in the Evidence, Criminalistics, DNA, Drug, Trace, Toxicology, and Bomb/Arson Units

BOSTOST SEPARTMENT	CC #_ BOOK #		
DRUG RECEIPY	PAGE #		
District/Unit DY BUNC 71	olic Shoty		
Name & Rank of Arresting Officer	,	ID#	
DEFENDANT'S NAME	ADDRESS	CITY	STATE
DECODIDATION OF THE ARE OF THE PARTY OF	GROSS	GROSS	SE ONLY  ANALYSIS
DESCRIPTION OF ITEMS SUBMITTED	QUANTITY	WEIGHT	NUMBER
Lightly wrapped bags de	3 B Jander 11	16,33	
Exercised Sycamoral politicist	cacle	2,200	
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1			
	•		
,			
o be completed by ECU personnel only  Jame and Rank of Submitting Officer	meg can	ID#	
Received by		Date	-20-11
		ECU Control #	
			Folk_OIG_PRR_

No. Date Analyzed: 1 2017
City: Boston D.C.U. Police Dept.
Officer: P.O. RENEE JACKSON
Def:
Amount: Subst: SUB
No. Cont: 11 Cont: pb

Date Rec'd: 07/20/2011

Gross Wt.: 16.33 L

No. Analyzed: 2 Net Weight: 9.33

Prelim: COCOUNE

FindIngs:

No. Date Analyzed: | 2 | 2 | 2

Officer: P.O. RENEE JACKSON

Def:

Amount:

Cont: pb

No. Cont: 1

Date Rec'd: 07/20/2011

Gross Wt.: 2.32 /

No. Analyzed:

Net Weight: O 6 3

# Tests

Subst: SUB

Prelim: COLOLINE Efindings:

SAMPLE # AGENCY	Boston DOM ANALYST MYC
No. of samples tested:	vidence Wt 16.33e
PHYSICAL DESCRIPTION:	Gross Wt ( ): 11, 3789
11 p b with substand	Gross Wt ( ):
8 Comer	Pkg. Wt:
	Net Wt: (3358)
- 23 smaller (1 opened	UNICHOITED OHAUS 2334 1-7-12
[60]	0K = 010 VV/10-
#1 layer by not 1.0733	x8 = 8,5864y 10% = 10,0002 8
# 2 smalluber net 0.249?	3 = 0,774   1g = 1,0000g
	9.3358
PRELIMINARY TESTS Spot Tests  Cobalt Thiocyanate (A) To blue Policy Marquis  Froehde's  Mecke's	Microcrystalline Tests  Gold Chloride  TLTA  O'THER TESTS
PRELIMINARY TEST RESULTS	GC/MS CONFIRMATORY TEST
RESULTS COCAINE	RESULTS COCUM
DATE 1-7-12	MS VAR
	DATE 1-26-12

# DRUG POWDER ANALYSIS FORM

SAMPLE#	AGENCY BOS ON DOM ANALYST MYC
No. of samples tested:	Evidence Wt. 16,339
PHYSICAL DESCRIPTION:	Gross Wt ( ): 11,3789
Ilpb with swood	Gross Wt ( ):
	Pkg. Wt:
1×07/3X 9×4 9×4 1×69643	lope ned, unknotted) OHAUS 2334 1-7-12
	and the second s
16	1.0733x8 = 0,5864y 10% = 10,00028
··· —	0.249843=074948 16=4.94948
^5864 <del>*</del> · · · · · · · · · · · · · · · · · · ·	9.33585
. 0.7350%	
0.0	#2 Microcrystalline Tests #2
Iniocyanate (A) The Co	Gold Chloride P H
Marquis	TLTA ( ) ( )
Froehde's NAK BROWN	OTHER TESTS
Mecke's	$\mathcal{J}$
PRELIMINARY TEST RESULTS	GC/MS CONFIRMATORY TEST
RESULTS CO CONVE	RESULTS COCUM
DATE 1-7-12	MS VAR
	DATE 1-26-12

# <del>DRUG POWDER ANALYSIS FORM</del>

SAMPLE# AC	BENCY BOS PRIDOL ANALYST MC
No. of samples tested:	Evidence Wt.
PHYSICAL DESCRIPTION:	Gross Wt ( ): 0,4128;
	Gross Wt ( ):
lpb w/sub	Pkg. Wt:
	OHAUS 2334 1-7-1 20,00018
	10 = 10.0002 g 5 = 4.999 9 p
	10=1,00009
PRELIMINARY TESTS  Spot Tests  (A L  Cobalt	Microcrystalline Tests Gold
Thiocyanate (+) Marquis	Chloride TLTA
Froehde's	OTHER TESTS
Mecke's	*
PRELIMINARY TEST RESULTS RESULTS COCOLINE	GCIMS CONFIRMATORY TEST RESULTS COULD
DATE 1-7-12	MS COPERATOR A COPERATOR
	DATE 1-12-12/

File Name : F:\SYSTEM7\01 11 12\813232.D

Operator : KAC

Date Acquired : 11 Jan 2012 18:12

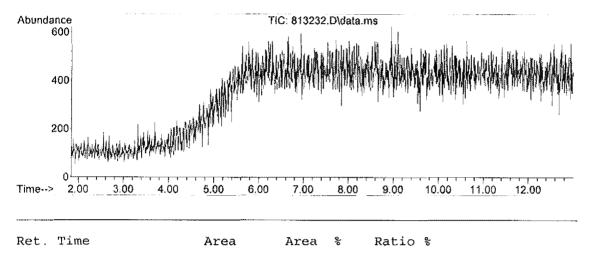
Sample Name

: BLANK

Submitted by Vial Number

AcquisitionMeth: DRUGS.M

Integrator : RTE



File Name : F:\SYSTEM7\01\_11\_12\813233.D

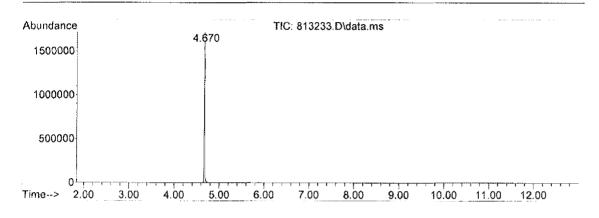
Operator : KAC

Date Acquired : 11 Jan 2012 18:28

Sample Name : COCAINE STD

Submitted by

Vial Number : 33 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.670	1516817	100.00	100.00

File Name : F:\SYSTEM7\01\_11\_12\813233.D

Operator : KAC

Date Acquired : 11 Jan 2012 18:28

Sample Name : COCAINE STD

Submitted by

Vial Number : 33 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

C:\Database\SLI.L Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 70

99

C:\Database\PMW TOX2.L

PK# RT Library/ID CAS# Qual

1 4.67 C:\Database\SLI.L COCAINE 000050-36-2

Abundance Average of 4.633 to 4.839 min.: 813233.D\data.ms (-)

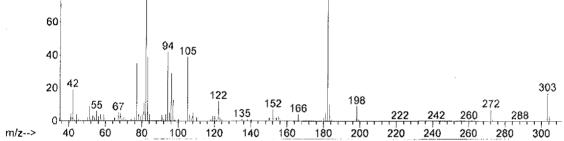
82

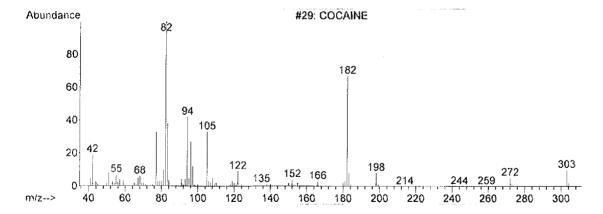
182

80

60

94 105



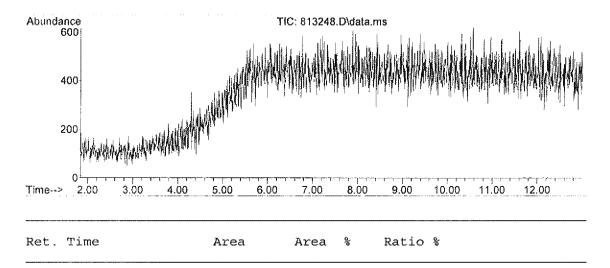


File Name : F:\SYSTEM7\01 11 12\813248.D

Operator : KAC

Date Acquired : 11 Jan 2012 22:21

Sample Name : BLANK
Submitted by : MGL
Vial Number : 2
AcquisitionMeth: DRUGS.M
Integrator : RTE



File Name : F:\SYSTEM7\01\_11\_12\813249.D

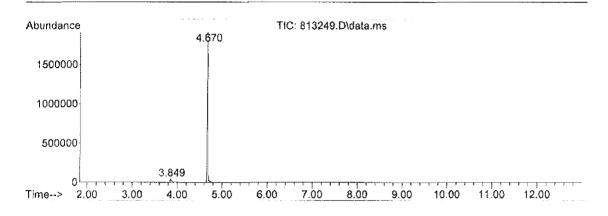
Operator : KAC

Date Acquired : 11 Jan 2012 22:37

Sample Name Submitted by : MGL Vial Number 49

AcquisitionMeth: DRUGS.M

Integrator : RTE



Ret. Time	Area	Area %	Ratio %	
3.849	100400	5.22	5.51	
4.670	1823200	94.78	100.00	

File Name : F:\SYSTEM7\01 11 12\813249.D

Operator : KAC

Date Acquired : 11 Jan 2012 22:37

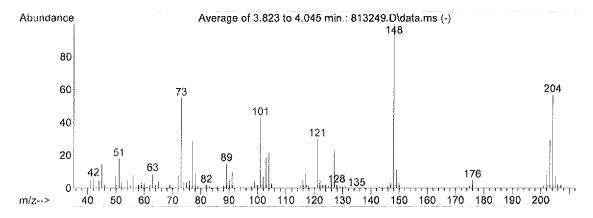
Sample Name Submitted by : MGL Vial Number 49 AcquisitionMeth: DRUGS.M Integrator : RTE

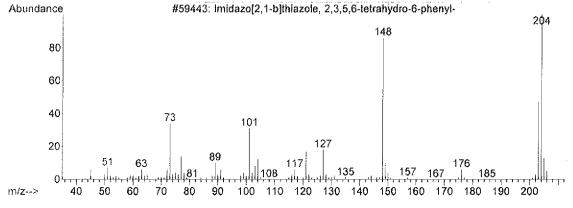
Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 70

C:\Database\PMW\_TOX2.L

	PK#	RT	Library/ID		CAS#	Qual
-	1	3.85	C:\Database\NIST05a.L			
			<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	006649-23-6	97
			<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	014769-73-4	96
			Imidazo[2,1-b]thiazole,	2,3,5,6-tet	006649-23-6	95





File Name : F:\SYSTEM7\01 11 12\813249.D

Operator : KAC

Date Acquired : 11 Jan 2012 22:37

Sample Name Submitted by : MGL Vial Number 49

AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 70

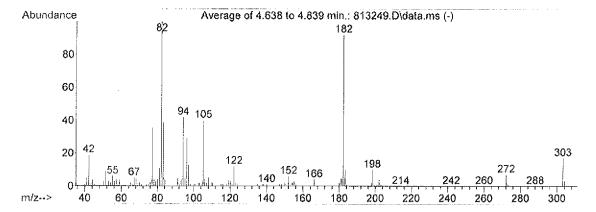
99

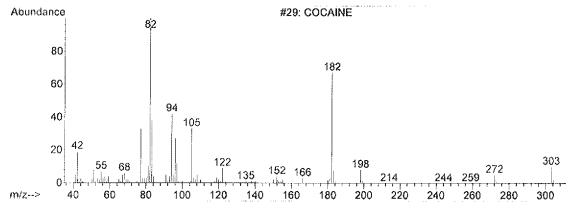
C:\Database\PMW\_TOX2.L

PK# RT Library/ID CAS# Qual

2 4.67 C:\Database\SLI.L

COCAINE 000050-36-2





File Name : F:\SYSTEM7\01\_11\_12\813251.D

Operator : KAC

Date Acquired : 11 Jan 2012 23:07

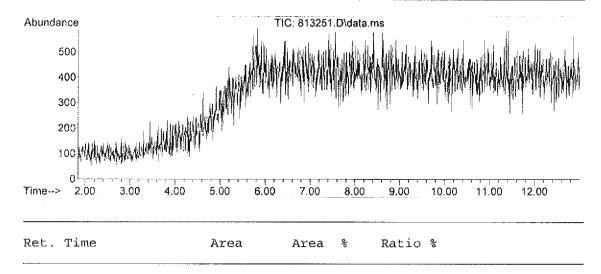
Sample Name : BLANK

Submitted by

Vial Number : 2

AcquisitionMeth: DRUGS.M

Integrator : RTE



File Name : F:\SYSTEM7\01\_11\_12\813252.D

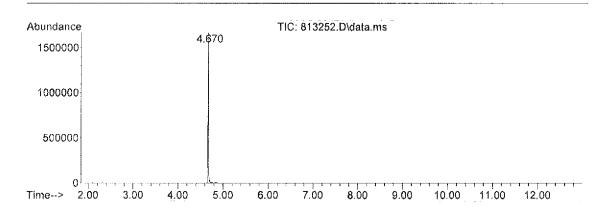
Operator : KAC

Date Acquired : 11 Jan 2012 23:23

Sample Name : COCAINE STD

Submitted by

Vial Number : 52 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.670	1445569	100.00	100.00

: F:\SYSTEM7\01 11 12\813252.D File Name

Operator : KAC

Date Acquired : 11 Jan 2012 23:23

Sample Name : COCAINE STD

Submitted by

Vial Number 52 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 C:\Database\NIST05a.L Minimum Quality: 70

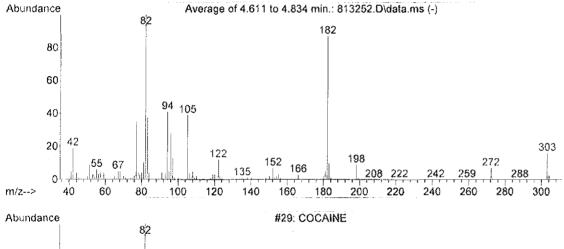
C:\Database\PMW TOX2.L

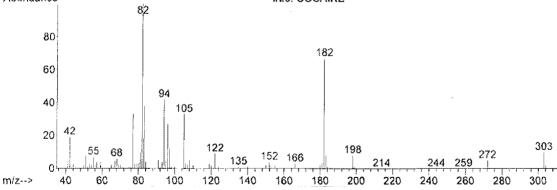
PK# RTLibrary/ID CAS# Oual

C:\Database\SLI.L 4.67 1

COCAINE

000050-36-2 99





### Area Percent / Library Search Report

JKAC 3/1/12

Information from Data File:

File Name : F:\SYSTEM7\01\_24\_12\814612.D

Operator : KAC

Date Acquired : 24 Jan 2012 13:29

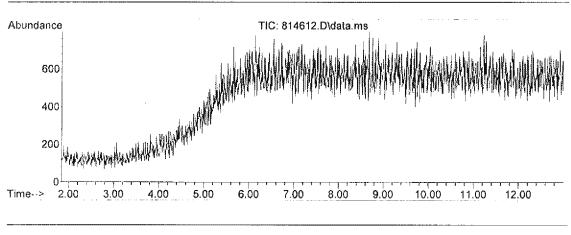
Sample Name : BLANK

Submitted by

Vial Number : :

AcquisitionMeth: DRUGS.M

Integrator : RTE



\_\_\_\_\_\_

Ret. Time

Area

Area

Ratio %

File Name : F:\SYSTEM7\01\_24\_12\814613.D

Operator : KAC

Date Acquired : 24 Jan 2012 13:45

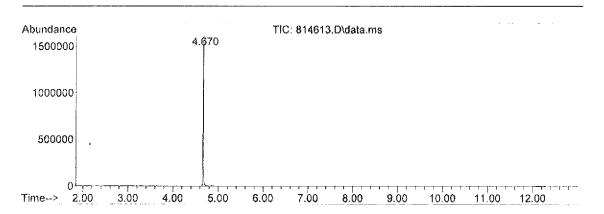
Sample Name : COCAINE STD

Submitted by :

Vial Number : 13

AcquisitionMeth: DRUGS.M

Integrator : RTE



Ret. Time	Area	Area %	Ratío %
4.670	1623834	100.00	100.00

File Name : F:\SYSTEM7\01 24 12\814613.D

Operator : KAC

Date Acquired : 24 Jan 2012 13:45

Sample Name : COCAINE STD

Submitted by

Vial Number 13 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 70

99

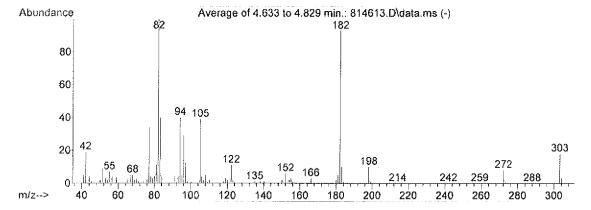
C:\Database\NIST05a.L

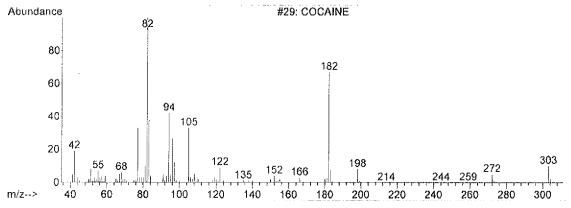
C:\Database\PMW TOX2.L

PK# RTLibrary/ID CAS# Qual

C:\Database\SLI.L 1 4.67

COCAINE 000050-36-2



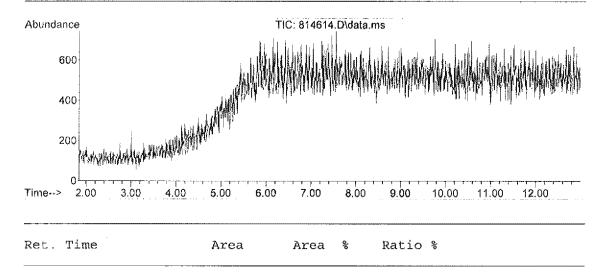


File Name : F:\SYSTEM7\01 24 12\814614.D

Operator : KAC

Date Acquired : 24 Jan 2012 14:01

Sample Name : BLANK
Submitted by : MGL
Vial Number : 1
AcquisitionMeth: DRUGS.M
Integrator : RTE



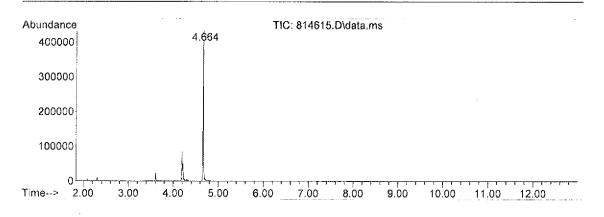
File Name : F:\SYSTEM7\01 24 12\814615.D

Operator : KAC

Date Acquired : 24 Jan 2012 14:17

Sample Name : Submitted by :

Vial Number : 15
AcquisitionMeth: DRUGS.M
Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.664	399596	100.00	100.00

File Name : F:\SYSTEM7\01 24 12\814615.D

Operator : KAC

Date Acquired : 24 Jan 2012 14:17

: RTE

Sample Name :
Submitted by : MGL
Vial Number : 15
AcquisitionMeth: DRUGS.M

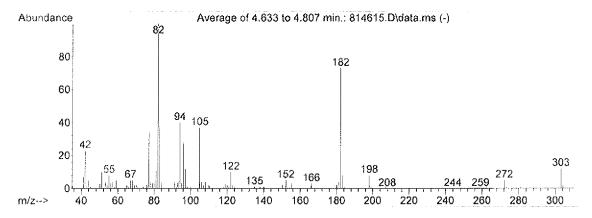
Integrator

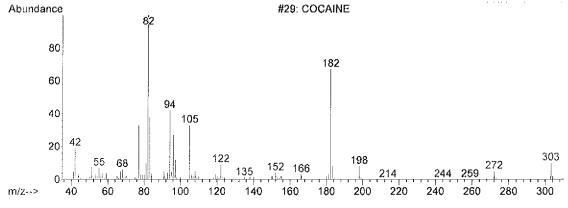
Search Libraries: C:\Database\SLI.L Minimum Quality: 80

C:\Database\NIST05a.L Minimum Quality: 70

C:\Database\PMW TOX2.L

PK# RT Library/ID CAS# Qual





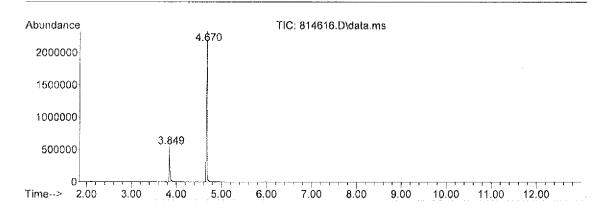
File Name : F:\SYSTEM7\01 24 12\814616.D

Operator : KAC

Date Acquired : 24 Jan 2012 14:32

Sample Name : MGL

Vial Number : 16 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %
3.849	691659	79.58	25.65
4.670	2696226		100.00

File Name : F:\SYSTEM7\01 24 12\814616.D

Operator : KAC

Date Acquired : 24 Jan 2012 14:32

Sample Name

Submitted by : MGL Vial Number 16 AcquisitionMeth: DRUGS.M Integrator : RTE

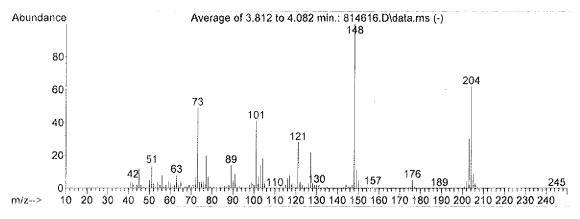
Search Libraries: C:\Database\SLI.L

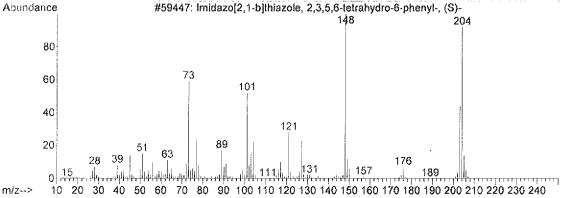
Minimum Quality: 80 Minimum Quality: 70

C:\Database\NIST05a.L

C:\Database\PMW\_TOX2.L

PK#	# RT Library/ID			CAS#	
1	3.85	C:\Database\NIST05a.L			
		Imidazo[2,1-b]thiazole,	2,3,5,6-tet	014769-73-4	99
		Imidazo[2,1-b]thiazole,	2,3,5,6-tet	006649-23-6	98
		<pre>Imidazo[2,1-b]thiazole,</pre>	2,3,5,6-tet	006649-23-6	98





File Name : F:\SYSTEM7\01 24 12\814616.D

Operator : KAC

Date Acquired 24 Jan 2012 14:32

Sample Name Submitted by Vial Number 16 AcquisitionMeth: DRUGS.M Integrator : RTE

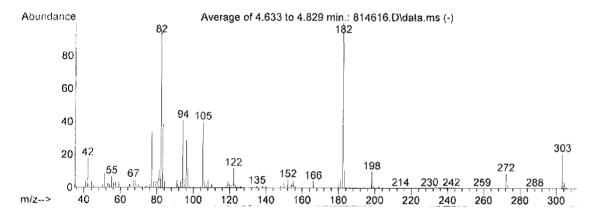
Search Libraries: C:\Database\SLI.L Minimum Quality: 80 Minimum Quality: 70

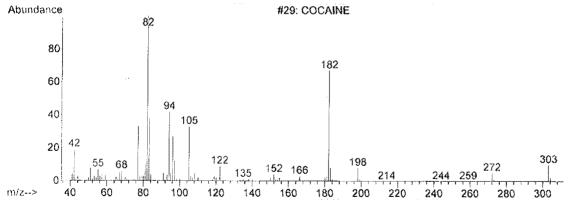
C:\Database\NIST05a.L

C:\Database\PMW TOX2.L

PK# RTLibrary/ID CAS# Qual

2 4.67 C:\Database\SLI.L COCAINE 000050-36-2 99





File Name : F:\SYSTEM7\01\_24\_12\814631.D

Operator : KAC

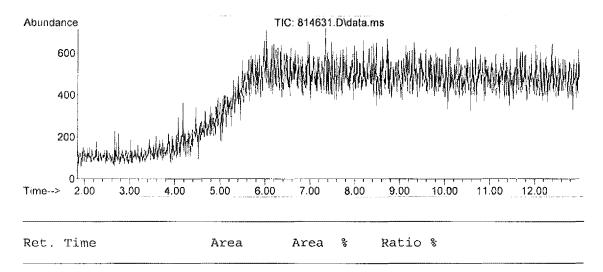
Date Acquired : 24 Jan 2012 18:26

Sample Name : BLANK

Submitted by

Vial Number : 1

AcquisitionMeth: DRUGS.M Integrator : RTE



File Name : F:\SYSTEM7\01 24\_12\814632.D

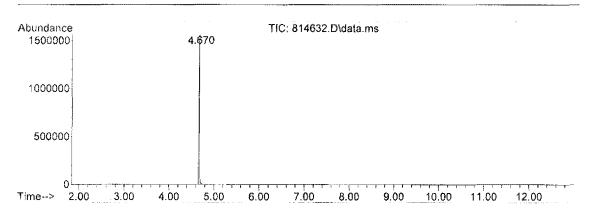
Operator : KAC

Date Acquired : 24 Jan 2012 18:42

Sample Name : COCAINE STD

Submitted by

Vial Number : 32 AcquisitionMeth: DRUGS.M Integrator : RTE



Ret. Time	Area	Area %	Ratio %
4.670	1595465	100.00	100.00

; F:\SYSTEM7\01\_24 12\814632.D File Name

: KAC Operator

Date Acquired 24 Jan 2012

Sample Name COCAINE STD

Submitted by

RT

PK#

Vial Number 32 AcquisitionMeth: DRUGS.M Integrator : RTE

Search Libraries: C:\Database\SLI.L

Minimum Quality: 80 Minimum Quality: 70

C:\Database\NIST05a.L C:\Database\PMW TOX2.L

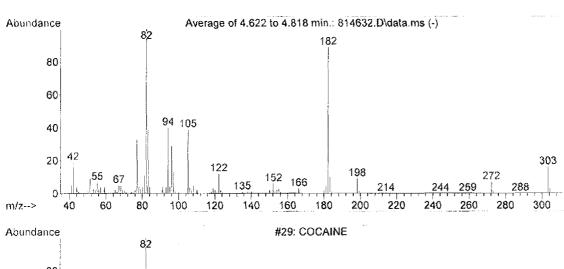
Library/ID CAS# Qual

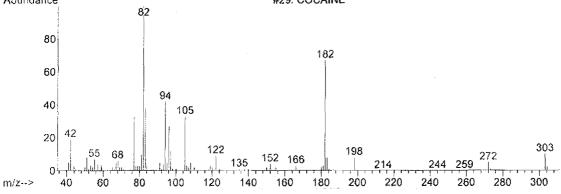
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This is the last page of the transmission.

No further data.